## ABSTRACT OF THE DISCLOSURE

Methods for converting a source character string to a target character string are described herein. In one aspect of the invention, an exemplary method includes receiving a first character string having the source character string, dividing the first character string into a plurality of sub-strings, converting the plurality of the substrings to second character strings through a dictionary, creating third character strings corresponding to the plurality of the sub-strings, analyzing the second and third character strings, constructing fourth character strings from the second and third character strings based on the analysis, creating a candidate list based on the fourth character strings, selecting the target character string from the candidate list and outputting the target character string. Other methods and apparatuses are also described.